WHAT IS CLAIMED IS:

1. A method for the manufacture of a substance having an apoptosis-inducing ability characterized in including a step of subjecting at least one compound selected from the following (a), (b), (c) and (d) [excluding uronic acid and/or uronic acid derivatives; and compounds which contain uronic acid and/or uronic acid derivatives] to a heating treatment:

(a) pentose;

(b) pentose derivatives;

(c) compounds containing pentose;

(d) compounds containing pentose derivatives.

2. A method for the manufacture according to claim 1 which pentose is ribose or xylose.

3. A method for the manufacture according to claim 1 which pentose derivatives are deoxypentose.

4. A method for the manufacture according to claim 1 which pentose derivatives are deoxyribose.

5. A method for the manufacture according to claim 1 which compounds containing pentose are ribonucleoside, ribonucleotide or ribonucleic acid.

6. A method for the manufacture according to claim 1 which compounds containing pentose are pentose where a group of

pentose derivatives are pentose derivatives where a group of

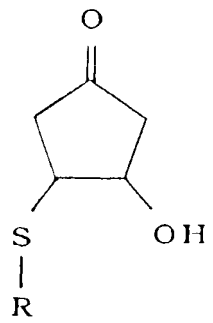
capable of having a negative charge is bonded at 5-position.

8. A method for the manufacture according to claim 6 or 7 which a group of capable of having a negative charge is phosphoric acid group or sulfuric acid group.

9. A method for the manufacture according to claim 1 which compounds containing pentose derivatives are deoxyribonucleoside, deoxyribonucleotide and deoxyribonucleic acid.

10. A method for the manufacture according to ~~any~~ of ~~claims~~ 1-9 which the substance having an apoptosis-inducing ability are the compounds selected from 4,5-dihydroxy-2-pentenal, 4-hydroxy-2-cyclopenten-1-one, 4-(9-adeninyl)-2-cyclopenten-1-one, 4-(9-guaninyl)-2-cyclopenten-1-one, 1,5-epoxy-1-hydroxy-3-penten-2-one and 4,5-dihydroxy-2-cyclopenten-1-one.

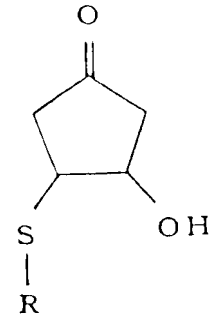
11. An apoptosis-inducing compound selected from 4-(9-adeninyl)-2-cyclopenten-1-one, 4-(9-guaninyl)-2-cyclopenten-1-one, 1,5-epoxy-1-hydroxy-3-penten-2-one, 2-(3,4-dihydroxy-1-butenyl)-4-(2-formylvinyl)-1,3-dioxolane and the compound represented by the following formula [I].



[I]

(In the formula, R is a residual group after removal of an SH group from a compound containing an SH group.)

12. A pharmaceutical agent for therapy or prevention of a disease having a sensitivity to a compound selected from 4,5-dihydroxy-2-pentenal, 4-hydroxy-2-cyclopenten-1-one, 4-(9-adeninyl)-2-cyclopenten-1-one, 4-(9-guaninyl)-2-cyclopenten-1-one, 2-(3,4-dihydroxy-1-butenyl)-4-(2-formylvinyl)-1,3-dioxolane, 1,5-epoxy-1-hydroxy-3-penten-2-one and a compound represented by the formula [I], characterized in that, said pharmaceutical agent contains a compound selected from 4,5-dihydroxy-2-pentenal, 4-hydroxy-2-cyclopenten-1-one, 4-(9-adeninyl)-2-cyclopenten-1-one, 4-(9-guaninyl)-2-cyclopenten-1-one, 2-(3,4-dihydroxy-1-butenyl)-4-(2-formylvinyl)-1,3-dioxolane, 1,5-epoxy-1-hydroxy-3-penten-2-one and a compound represented by the formula [I] as an effective



[I]

(In the formula, R is a residual group after removal of an SH group from a compound containing an SH group.)

13. A pharmaceutical agent according to claim 12 which said pharmaceutical agent are anticancer agent, apoptosis inducer, antirheumatic agent, inducer for production of human insulin-like growth factor, suppressor of the active oxygen production and inducer of the heat shock protein.

14. Food or beverage where a substance having an apoptosis-inducing ability obtained by subjecting at least one compound selected from the following (a), (b), (c) and (d) [excluding uronic acid and/or uronic acid derivatives; and compounds which contain uronic acid and/or uronic acid derivatives] to a heating treatment and/or a partially purified product thereof are/is contained therein, diluted therewith and/or added thereto:

[illegible]

(d) compounds containing pentose derivatives.

15. Food or beverage according to claim 14 which food or beverage is food or beverage for carcinostatic, apoptosis-inducing, antirheumatic, human insulin-like growth factor production inducing, active oxygen production suppressing or heat shock protein inducing.